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Sex Differences in Porteus Maze Test Performance

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A number of psychological investigations have been undertaken for the purpose of showing mental differences between the sexes at all ages from childhood to the adult period.

Yerkes, Bridges, and Hardwick (13) in their application of the Point Scale to children from 4 to 15 years of age say: "Comparison of the data for the English speaking groups clearly indicates that the girls attain higher scores than the boys between the ages of 5 and 7, that they tend to fall below the average for the boys, with minor variations up to the age of 11, when they again for a year or two surpass the boys, only to drop below once more from 14 onward." For non-English speaking groups the girls from 11 to 15 showed marked superiority.

Terman (9) found on the basis of I. Q. comparisons a small but constant superiority of the girls up to the age of 13 years, although as regards the necessity for providing sex norms for evaluating results, he regards the superiority as negligible.

Porteus (4) in the examination of 1,000 Australian children by the Stanford Revision of the Binet-Simon Test found that at 6, 10 and 12 years of age the girls equalled the boys, but that at all other ages from 5 to 14 the boys showed an average superiority amounting to .23 of a year in mental age.

Pressey (7) by combining the results from ten tests applied to girls and boys from 9 to 16 years of age found that the boys averaged lower throughout than the girls: "In terms of mental age the boys tested about six months below the girls. The averages for the two sexes, however, came almost together at 16 years."

Analyzing results by single tests she found that the girls had the advantage in rote memory, in literary tests (opposites, word completion, classification of moral terms, dissected sentences and analogies) and were slightly ahead in tests of judgment and logical memory, whilst the boys showed superiority in the arithmetic test and in the test for practical information.

At 16 years of age, however, in eight of the ten tests employed, more than fifty per cent. of the boys scored above the girls' median.

Woolley and Fischer (12) in testing working children at 14 and 15 years of age found that the girls exceed the boys in height, weight, steadiness, and card sorting, whilst in vital capacity, strength, and rapidity of movement the boys have the advantage. No marked sex differences in the mental tests were apparent except in the opening of the puzzle box, which is accounted for by the supposed greater effect of previous experience in boys with regard to mechanical construction.

Strong (8) in his study of sex differences in ability to report alludes to the "general psychological principle that even those mental sex differences which are large in adults are relatively slight in childhood."

Trabue in his Completion Test Scales (11) found that boys make a somewhat lower median score than girls in the same grade.

Burt and Moore (1) in their exceedingly careful study of sex differences state: "Feminine superiority is a constant phenomenon in memory tests of every kind. It matters little what the age or training of the subjects may be. Hence it is one of the best attested sex differences; and one of the most likely to be innate. It doubtless underlies the characteristic so commonly observed by teachers, viz., that girls and women 'assimilate' so much more rapidly than boys or men." This observation agrees on the whole with the results of other investigators, including Pyle, Anderson, Pohlmann, Schuyler, and others.

These authors (Burt and Moore) finally reach the following conclusions: "The higher the process and the more complex the capacity, the smaller, on the whole, become the sex differences. * * * Neither on the simplest level, nor the more complex levels, nor on the highest levels of all, neither on the intellectual side, nor on the practical side, nor on the emotional side, have we found sex differences so large as those found in few physical characteristics. So far as the innate differences exhibit any general tendency in their relative size,

they tend to diminish rather than to increase as we pass upwards from simple processes of sensation and movement to complex processes of reasoning."

This final conclusion is in general agreement with Thorndike's (10) view that "sex is the cause of only a small fraction of the differences between individuals; the differences of man from man and of woman from woman are as great as the differences between man and woman."

SEX DIFFERENCES—BRAIN GROWTH

The publication of the Berry-Porteus averages and percentile tables of brain capacity for all ages from 7 years to maturity enables us to make a more accurate comparison of brain growth in the sexes.

From Table 5 of the Berry-Porteus monograph[1] are collected the data which form the basis of Table 1. This table represents individuals which belong to the same social class and have had a similar educational experience. It will be seen that males have a larger brain capacity at each age, the advantage being somewhat less marked from 11 to 15 years of age. At 16 years, however, there is an apparent diminution of brain growth in females.

The average advantage of the males included in this table amounts to 116.4 cubic centimeters. This is equal to the average total of increase in brain capacity in the female during the 10 years under review and hence it must be regarded as a relatively large difference. Further, as is the case with other physical measurements, the advantage in brain capacity becomes progressively greater from 15 years onward to maturity.

The pubescent and postpubescent brain growth in females from 12 years onwards amounts to 107 cu. cm. and in males to 157 cu. cm. In other terms female pubescent and postpubescent brain growth amounts to 8.7 per cent. of the ultimate adult female capacity, whilst male brain growth during the same periods is 11.2 per cent. of the ultimate male capacity. Confining the comparison to the postpubescent period, from 15 years onward, the female increase amounts to only 4.7 per cent. of the adult capacity as against 8.4 per cent. for the male.

Though the brain of the girl at pubescence is relatively more mature than that of the boy, it is evident that the advantage as regards postpubescent development is decidedly with the latter. There can be little doubt that this postpubescent increase is most significant, yet according to the investigations previously summarized there is no

[1]Intelligence and Social Valuation, p. 34.

Table No. 1

SEX DIFFERENCES IN BRAIN GROWTH

	11	12	13	14	15	16	17	18	19	20-29
Average Brain Cap., Males	1317	1326	1351	1358	1378	1402	1422	1447	1463	1483
Average Brain Cap., Females	1217	1226	1257	1271	1279	1304	1305	1307	1324	1333
Male Excess	100	100	94	87	99	98	117	140	139	150

Average Male Excess.....116.4

Increase Male 166

Increase Female 116

Pubescent and *Postpubescent Growth*, 12 to 20 years:

Male 158

Female 107

relative increase in mental power in the male during this period. The general conclusion appears to be that advantages are fairly well balanced, the superiority if any being in favor of the girl. It is quite evident that the mental correlates for this increased postpubescent brain development must be looked for outside the field of learning capacity.

THE GRADED MAZE TESTS

The Porteus graded maze tests bring to light some well authenticated sex differences in performance. These tests are designed to reflect the subject's tendency to use forethought, planning capacity and mental alertness, to inhibit impulsive action, to resist misleading suggestions, and in short to prove the capacity for speedy and successful adjustment to a concrete situation new to experience. As far as the tests can be trusted to give us a sample of the subject's habitual reactions they may be regarded as providing a valuable measure of the person's potential social fitness. That they usually do provide a sample of the person's behavior is true of the tests when used with high grade feeble-minded and socially maladjusted individuals. This is borne out by studies which go to prove that these tests, especially with females, correlate highly with industrial ability and with general social fitness. With these cases the maze tests may be accepted as giving a very good indication of the subject's capacity for self-management and self-support. Whether these correlations would be as high in the case of normals or when the tests are extended to adult levels is, of course, not proven, but it is probable that the tests examine substantially the same capacities throughout.

SEX DIFFERENCES IN THE MAZE TESTS

It will probably be admitted that in matters of practical judgment, in the control of emotions and of certain instincts, and in industrial ability outside the educational field, in self-reliance and in foresight in everyday affairs the male has the advantage.

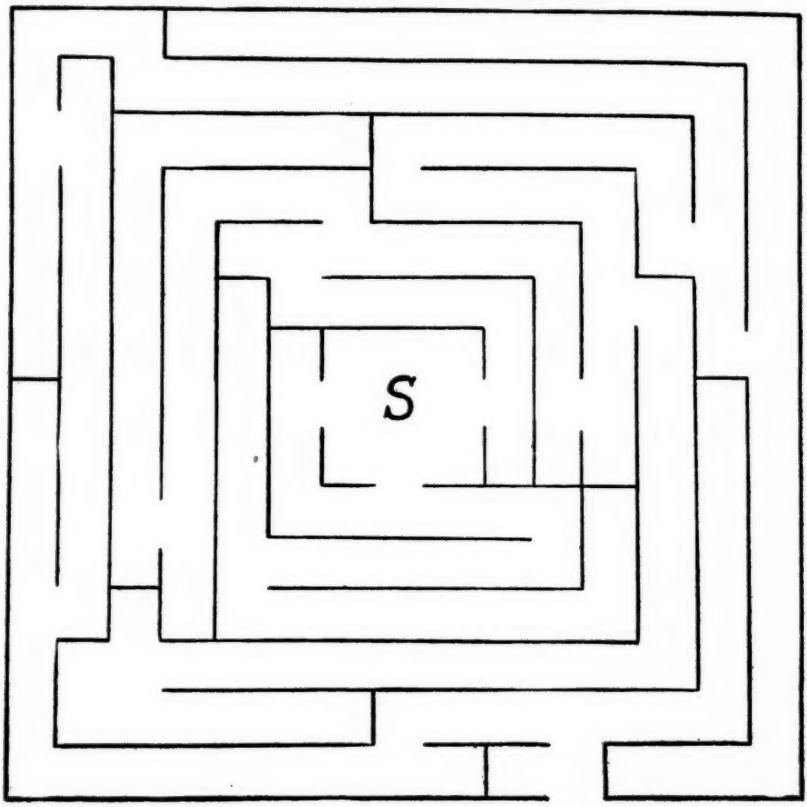
As the capacities examined by the tests underlie to a greater or less extent these characteristics it may be interesting to investigate whether the sex differences are reflected in performance in the tests.

Two groups of 253 boys and 200 girls were tested by one of us in 1916 and reported in the *Journal of Educational Psychology* for January, 1918. Results showed that in comparison with Binet ratings the boys had a decided advantage. An examination of a larger group of 1,000 children in the same year made an age for age comparison possible. In 1918 the experiment was repeated with 1,255 children

and in 1919 with 200 children. The results of these examinations have been summarized thus:[1]

"In both the 1916 and 1918 investigations boys have an undoubted advantage up to and including age 11.5, the advantage at the latter point being well marked, amounting to .72 of a year in one group and an average in test age of .54 of a year in the other group. At 12.5

Porteus Test—Vineland Revision—Adult 1



years, however, the girls exceed the boys by from .28 to .4 of a year in test performance.

"It is apparent then that there is a remarkable spurt in development in girls from 11½ to 12½ years of age. At 13 years of age both boys and girls are practically level in average performance."

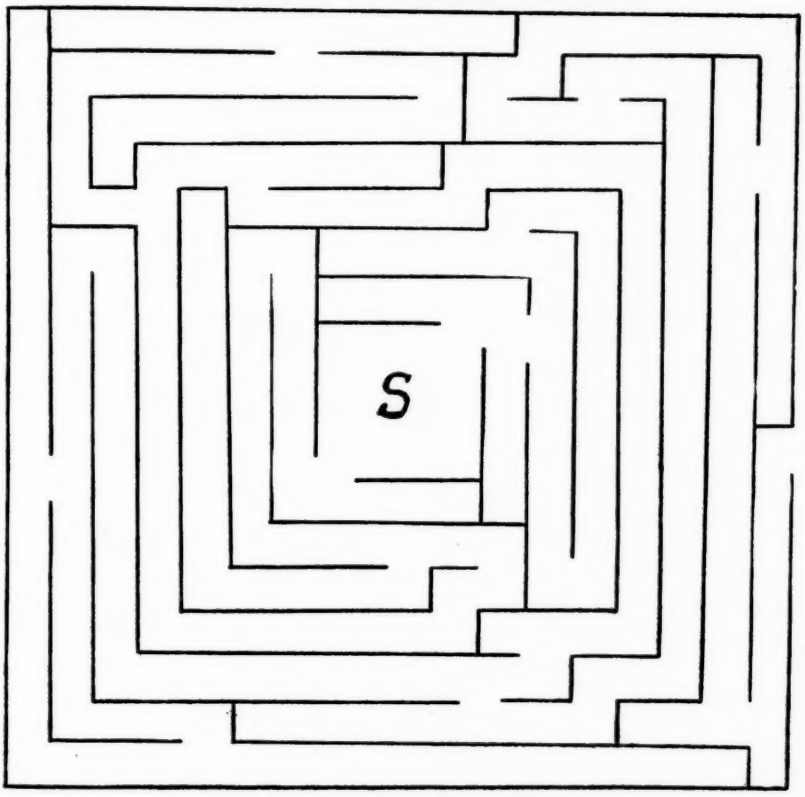
In discussing these results, Hollingworth (2) objects that Porteus "often designates as a 'spurt' an increment of growth no greater than might be expected as a continuation of the general trend of the curve

[1]Porteus Tests, Vineland Revision (6), p. 11.

allowing for fluctuation due to chance factors."

In answer to this it may be observed that the "spurt" in development was shown in two independent investigations so that the influence of "chance factors" was well guarded against, not only by large numbers of cases, but by a repeated experiment, and that whether expected or not, the girls' added increment is still apparent.

Porteus Test—Vineland Revision—Adult II



RESULTS WITH ADULT TESTS

In order to examine sex differences in performance beyond 13 years two adult maze tests were devised and applied along with the twelve and fourteen year tests of the maze series to a group of 682 high school children, ranging in age from 13 to 19 years. These included pupils from the high schools of Vineland, Millville, and Bridgeton, New Jersey, and numbered as follows: Vineland, 286; Millville, 267; Bridgeton, 129. Each pupil was given the 12 year

test, the 14 year test, and the two new tests, Adult I and Adult II. The tests were applied in the following manner:

On presenting Test XII the examiner said: "I am going to show you a drawing of a maze. There is only one way out of the maze and I am going to see if you can find it. You must try and find your way out with as few errors as possible. As soon as you make a mistake you must start again and have another trial. You are not allowed to correct an error and you must not cross any line, but find your way through the opening. You are not expected to hurry, but don't waste any time."

For each test except XII, which served merely as a practice test, a record of trials and of time was made. Not more than 10 minutes were allowed for any one test. In case of failure or great difficulty with Test XII the examiner gave assistance.

The average time and number of errors of students at each age were then calculated and the performances of subjects of each sex were compared. The figures are found in Tables 2 and 3.

SEX DIFFERENCES

It will be seen by reference to Table 2 that males made on the average less errors than females in the fourteen year test at each age except years 18 and 19; in Test Adult I at every age except year 14; and in Test Adult II at every age except year 15. As regards speed, the boys' average times exceed those of girls in every test at every age represented in the table. In other words, the boys are able to complete such a task successfully in less time than do the girls, and generally speaking with less errors in working. The girls' worse record indicates greater tendency to hesitancy, confusion, lesser planning and executive capacity. That it is not due to greater prudence is shown by their greater tendency to error. The difference in speed performance is sufficiently well marked as to merit further analysis.

This can best proceed through a comparison of the medians and certain percentiles. The boys' performances in comparison with the girls are shown in Tables 4, 5 and 6.

At 14 (see Tables 4, 5, 6) an average of 62.7 per cent. of boys have scores better than the median for girls, 30.06 per cent. have scores better than the 75 percentile for girls and 15.1 per cent. drop below the 25 percentile for girls. At this age the difference between the sexes is less than at any other of the 5 ages under consideration.

At 15, 64.9 per cent. of the boys score better than the median for girls. More than 40 per cent. score better than the 75 percentile and

Table No. 2

Accuracy

Age	Average Number of Trials Test XIV Boys		Average Number of Trials Test XIV Girls		Comparison by Age and Sex Test Adult I Boys		Comparison by Age and Sex Test Adult I Girls		Comparison by Age and Sex Test Adult II Boys		Comparison by Age and Sex Test Adult II Girls	
13	4.39	23	6.36	22	4.04	24	4.54	22	4.21	23	6.04	22
14	4.38	60	5.30	65	4.67	62	4.58	64	5.19	62	6.64	67
15	3.84	85	4.94	79	3.68	86	3.98	80	6.18	85	5.35	78
16	3.20	65	5.01	60	3.49	65	4.80	61	4.64	67	6.73	61
17	3.79	59	4.47	53	3.15	59	3.56	53	3.83	60	5.40	52
18	4.35	25	4.12	31	3.60	25	4.33	31	3.64	25	5.80	30
19	2.78	14	2.62	16	2.50	14	2.94	17	3.21	14	7.29	17

(Small figures indicate number of cases.)

Table No. 3

Speed

AVERAGE TIME — COMPARISON BY AGE AND SEX

Age	Test XIV Boys			Test XIV Girls			Test Adult I Boys			Test Adult I Girls			Test Adult II Boys			Test Adult II Girls		
	Min.	Sec.	23	Min.	Sec.	22	Min.	Sec.	23	Min.	Sec.	22	Min.	Sec.	23	Min.	Sec.	22
13	1	27		2	16		1	41		2	21		2	37		3	48	
14	1	30	59	2	10	68	1	55	62	2	13	66	2	47	62	3	21	67
15	1	28	83	2	16	79	1	28	83	2	1	80	3		82	3	29	78
16	1	21	66	1	58	61	1	33	67	2	7	61	2	34	66	3	49	61
17	1	22	58	1	55	54	1	8	59	1	58	53	2	31	58	3	23	53
18	1	19	25	1	53	31	1	22	25	1	41	31	1	58	25	3	40	29
19	1	11	14	2	3	15	1	8	14	1	15	17	2		14	3	19	16

(Small figures indicate number of cases.)

for Tests XIV and Adult I only 10.9 and 11.7 per cent. respectively score below the 25 percentile. For Test Adult II, however, only 48.8 per cent. of the boys score better than the median, 35.7 per cent. better than the 75 percentile and 19 per cent. below the 25 percentile.

Table No. 4

Speed

PER CENT OF BOYS ABOVE MEDIAN FOR GIRLS

Age	XIV	Adult I	Adult II	Average
14	69.4	53.2	64.5	62.7
15	73	72.9	48.8	64.9
16	68	65.6	68	67.2
17	79	77.9	79.6	78.8
18	68	52	76	65.3

At 16 there are 67.2 per cent. of boys who score above the 50 percentile for girls and more than 30 per cent. (except in Test Adult II) who score above the 75 percentile. In Test Adult II 68 per cent. score above the median and the median is much better than the average. But we find only 24 per cent. scoring above the 75 percentile. This small per cent., however, is balanced by a small per cent. (1.5 per cent.) scoring below the 25 percentile. Most scores are near the median and few in the high or low ranges.

At 17 the boys outstrip the girls more than at any other age. The girls' median is exceeded by 78 per cent. and the 75 percentile by 34.7 per cent. Only 3 per cent. of their scores fall below the 25 percentile.

At 18, 65.3 per cent. of the boys score above the girls' median and 50.6 per cent. above the 75 percentile; 12 per cent. fall below the 25 percentile. It will be noticed that in Test Adult II, 76 per cent. of the boys score above the 50 percentile and 64 per cent. above the 75

Table No. 5

Speed

PER CENT OF BOYS ABOVE 75 PERCENTILE FOR GIRLS

Age	XIV	Adult I	Adult II	Average
14	35.5	20.9	33.8	30.06
15	43.9	56.1	35.7	45.2
16	40.9	38.8	24	34.6
17	27.5	50.8	66	48.1
18	40	48	64	50.6

Table No. 6

Speed

PER CENT OF BOYS BELOW 25 PERCENTILE FOR GIRLS

Age	XIV	Adult I	Adult II	Average
14	8.4	16.1	20.9	15.1
15	10.9	11.7	19	13.9
16	10.5	16.4	1.5	9.47
17	1.0	3.0	5.0	3.0
18	8.0	24	4.0	12

percentile—this in spite of the fact that here the girls' median shows a greater improvement over the girls' average than at any other age.

These comparisons, then, show that at 14 the boys have the smallest advantage and at 17 the greatest advantage over the girls in the record for speed.

If we add together the per cent. of boys of each age scoring above the median for girls of that age and the per cent. scoring above the 75 percentile and then subtract from that the per cent. scoring below the 25 percentile we shall have an approximate index of superiority of boys for each age:

Age	Index	Ages in Order of Superiority
14	77.66	17
15	96.30	18
16	91.7	15
17	123.9	16
18	103.9	14

Except for the interchange of years 17 and 18 this order of indices agrees with the order of male excess in brain growth (see Table 1).

At 14 we have the least difference in the size of the brain and also the least male superiority in speed in taking the Porteus Tests.

By following the same formula we may compute an index for each test:

Test	Index of Male Superiority
XIV	101.3
Adult I	93
Adult II	104

Apparently, as regards these tests, the sex differences are as marked for the more difficult test, Adult II, as they are for the fourteen year test.

It may be concluded, then, that in the capacities involved in the solution of the maze problem boys tend to exceed girls, both as regards speed and accuracy, the advantage, however, being more marked in speed. In other words, adolescent males are more sure of themselves in such a situation, are less hesitant and confused, or else use more preconsideration and better foresight than females of equal age. It may be contended that self-reliance and independence are not developed in the girl because she is so hedged round with restrictions that her family or social customs or the opinion of her own fellows impose. The boy has so many more opportunities to exercise initiative and planning capacity, whilst the girl in average conditions has neither the necessity nor the opportunity to stand on her own feet.

It must be remembered, however, that the maze tests provide just as new a problem to the boy as to the girl. If the boys' different training affects the response favorably, then the practice effects are transferred from other fields. Secondly, the fact that the sex differences in test performance are so well marked at as young an age as 5 years points to the view that the causes are not wholly environmental.

In the majority of instances the girls' attitude in attacking the problem was one of greater seriousness and earnestness than the boys'. They appeared to be much more concerned over errors and were very self-conscious. Both over-inhibition and under-inhibition were fruitful causes of error. The boys adopted a more casual attitude, were less concerned in the realization of difficulties and mistakes, and with less apparent effort made a better score. In the majority of instances inferior records were ascribed by girls to "nervousness."

The view has been advanced that one of the functions of the supra-granular layer of cells in the cerebral cortex is to preserve that nice balance between inhibition and instinctive action that is called self-control. It has been shown also that postnatal brain development is associated more with growth of this supra-granular layer—which also subserves the educable functions—than with any other. In all probability postpubescent brain development is almost wholly concerned with increase in growth of this layer. If these theories are true, then it is probable that at least some of the psychological correlates of postpubescent brain increase have been brought to light by the tests. Added color is given to this supposition by the fact that primitive races, such as the Australian aboriginals, whose control over their emotions and instinctive activities is notably weak, make a comparatively low record by the tests, the deficiency being more pronounced the older the children. Brain capacity is markedly lower than in the white race and development apparently ceases much earlier, there being very little postpubescent development.

On the other hand, in females of superior races brain growth has been shown to go on after 20 years of age. It may well be that adolescence is with girls a somewhat unstable period and that added years may bring with them poise, self-confidence and less impulsive habits of action. In other words, mental maturity means greater self-control. Through the courtesy of Mr. Seth Wakeman, of Cornell University, 200 students' records have been added to the high school results. As the age groups are small the results have been collected into three

periods, viz., from 13 to 16 years, from 17 to 20, and from 21 years onward The total errors and time in the three tests were summated. Table 7 shows that with chronological age there is a marked improvement in speed and accuracy in the tests.

TABLE 7

Period	Average Time All Tests	Average Errors All Tests
13-16 years.....	466 seconds	15.75
17-20 years.....	400 seconds	13.75
21 and over.....	281 seconds	10

Unfortunately, sufficient records are not yet available to admit of a comparison with the performance of males of 21 years and over, but it is probable that the marked improvement shown by females of this age group would tend to bring their performances close if not equal to those of the other sex. At any rate, the table is sufficient to show that with women of maturer years the tendency to error is lessened and the speed of performance is increased. It is doubtful whether there are many mental tests outside the field of educational acquirement which show such a correlation with chronological age through such a wide range of years.

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On Institution Management

E. R. JOHNSTONE

The Employee

We all like to know that some one is aware of our efforts to do our work well, we all try to do it properly. We wish to work in harmony with our fellows. We desire to co-operate with them and to have them co-operate with us. We want their confidence and want them to have confidence in us. Can we be expected to work steadily when no one sees what we do? Will we keep up to our highest mark if no one pays any attention to us? Will we continue to give if others only take? If we were perfect and conditions were ideal perhaps we might. But we are not yet near enough to perfection to keep up a high degree of efficiency, helpfulness and faith, unless some one will frequently take the trouble to notice our *good* work and then tell us how he feels about it.

I believe that no one thing plays so large a part in the successful administration of an institution as forming the habit of seeing the good things people do, *and speaking of them.* Some weakness of humanity constantly tempts us to see the faults and talk about them. Gossip seems so easy. And yet, perhaps you have noticed that when a person who has the habit of "seeing the good in others" and telling it, leaves a group, all remarks about that person are pleasant ones. Such an employee is a wonderful leaven for good in an institution.

If, however, this habit is to be formed throughout an organization, it must begin at the top and be constantly renewed all the way down the line. It must be recognized that all of us, from the Superintendent on, really want to do a good piece of work. Our errors are usually due to misunderstanding and ignorance. How can we be expected to act in the spirit of the institution if we do not get our information or instruction in such a spirit? How can we fulfill its aims if we do not know what those aims are?

Two things will help greatly. First, if when an employee comes the head of his department will take time to talk over the work with him, tell him something about the children with whom he is to deal, explain their difficulties out in the world and the advantages in their being here, and do it all in a constructive spirit, it is a great help. I do not mean tell how many must be dressed, or explain how difficult they are to control, or show how slow they are to learn. Our tendency is to emphasize the difficulties—the negative side. I mean tell how worth while it has been to have spent many days in teaching all of these children to dress themselves, because now they can do it alone; explain what cheeriness and good feeling come from the use of the O. K. slip and other forms of encouraging discipline; show that after all patient instruction develops ability to do really remarkable things, even though a sixteen year old has only the mentality of an eight year old child. These children would not be here if they were normal, and so each person must undertake to build upon whatever powers they have.

The second thing is the meeting of the entire staff. Every month or two it is most valuable to call together all employees and tell them of what the institution is doing, or aiming to do, in connection with the outside world. This should not be a meeting for the correction of the faults of two or three over the shoulders of all. I can think of nothing so depressing or futile as a meeting of the staff to hear the criticisms of the Superintendent. Criticism to be constructive should be direct and individual. If you will take the trouble to investigate general group criticism, you will find that those who most merit it are sure to say, "Well, I'm glad he gave it to so and so," but they seldom take it home to themselves.

If a staff member may learn from such a meeting the part he plays in protecting the wards of the institution from society, in which they have no place, and society from them, for they have proved their unfitness to live in it, he will feel a personal interest and a personal part in helping to solve the countrywide problem of the defectives, the dependents, and the delinquents. From time to time as new employees come in, this meeting may deal with the history of the development of the institution, the reason for certain customs, the general methods adopted for classification and training and the reasons therefor. It is all too easy to think that people should know. In many cases they neither know nor understand.

To the above may be added the Bulletin Board as a source of information and encouragement. It is very human to want to know the latest news, to know what has happened before it becomes the common property of all the world. Note the people who crowd about a newspaper bulletin, even when the papers with all details will be on the street in a few minutes. The institution Bulletin Board should be a live thing, containing all sorts of institution news and thereby creating an interest on the part of each one in the other departments. Here, too, care must be taken that gossip or criticism be not placed before all, for the few. Every employee should be encouraged to furnish his bit of news, to the end that all may feel personally interested. Many years ago we found that it roused an added interest in the children to put up each month a list of the children's birthdays for that month, and to this we added the "institution birthdays" of the employees. Of this I shall speak later.

Other sources of interest to the staff are the institution monthly publication and the annual report, both of which should be made available to all.

Have you ever noticed how depressingly formal the stated reports on prepared forms are? They *look* so efficient, but in practice what a lot of them are filled up all in one day at the end of the week, and what plausible excuses there are if an officer finds them blank in mid-week. How often do employees feel that their reports are really read and noted? Some formality is, of course, needed for statistical purposes, but it is well worth while to see that those who make reports know that they are of real interest to those for whom they are made.

One successful plan is to have them made in diary form, the diary being returned daily or weekly to the maker with comments by the reader in blue pencil across the page. If these comments are uniformly constructive (for remember they are a part of a permanent record) and encouraging, you can soon get the person's mind in the habit of looking for and building up those things that you want. Our habit has been to make no comments on the things of which we do not approve. By putting on the Bulletin Board graphs or charts, or by writing a bulletin, we are also able to develop a real interest in the work of the different fields.

Another plan is to have some one (here it is the Superintendent's private secretary) go from place to place and see the individual children, talk over their improvement and advancement with the house-mother, teacher or farmer, and right there make notes of what

is said. This is then written in the form of a report on the child, and each one knows that it not only becomes a part of the institution's permanent records, but is also the basis of letters and reports to be sent home. This, and the fact that parents are encouraged to meet and talk with those who have the care of their children, makes our staff members feel that their work is getting the personal appreciation to which it is entitled. Perhaps you think that new employees and those who do not yet understand the institution and the children may give parents a false impression. They do occasionally, but the parents seldom fail to speak to one of the officers in such a case and the length of service is explained. This, too, often helps the employee.

Many years ago we worked out a credit and demerit system for the members of our staff. It was based upon a plan then in use by the Wabash Railroad. Slips were furnished each department head, and upon these he was asked to suggest commendation or censure for those in his department. A duplicate of the filled-in slip was sent to each employee. This worked beautifully whenever commendation was given, but always meant endless explanation and dissatisfaction in case of censure, so we abandoned it.

Now we tell the department heads that they have full authority to settle matters of censure, coming, of course, to their Superintendent if they cannot do so. But they are still encouraged to put their approvals in writing. If the thing is worthy the Superintendent sends to the employee, direct, a note of appreciation. Sometimes the Superintendent, as he goes about the grounds, stops and says the word of appreciation and thus makes it even a more personal matter.

An idea that is very much worth while is the observance of "institution birthdays," mentioned before. The day that any one comes into the service of the institution is noted in the perpetual diary. It is called that person's "institution birthday," and upon each anniversary of that day a note of congratulation is sent. It is always written in the spirit of real birthday greetings and never finds fault

or holds a covert criticism. It is, in fact, a word of cheer and good wishes. These notes are saved and when things look blue or difficult this written message of appreciation, stored away in a bureau drawer, helps mightily to tide over the hard time. The suggestion is often made that upon one's "institution birthday" he give special attention to those children whose real birthdays come on the same date. The employee has the satisfaction of doing something for a child, who might come to his attention in no other way, and the child gets a little more happiness out of his birthday.

There is one more thing that is helpful—the Diploma for Institutional Efficiency. After being in the service for more than two years any employee is eligible. The department heads, with the Superintendent, consider his qualifications. Loyalty stands first. Loyalty to the children, his fellow-employees, the officers, the institution and the cause are all considered. Then comes diligence in the doing of his duties, ability to perform them properly, and decorum toward employee, child and visitor. The diploma bears the seal and ribbons of the institution and the signatures of the officers. It is given out at a staff meeting with appropriate exercises. No matter what one's position, be he an efficient janitor, teacher, gardener or cook, artisan or driver, if his work is done with loyalty, diligence, ability and decorum he is entitled to a diploma for institutional efficiency along his line. That these diplomas are valued highly is attested by the fact that most of them are framed and hung up in conspicuous places.

To see the good and speak of it is the Superintendent's greatest duty and privilege, and as the habit passes along, teacher, housemother and child develop it to the greater happiness of all. It leads to confidence and co-operation.

(To be continued)

Requests for Special Teachers, Etc., September and October

Inquiry from Bala, Pa., for governess for five year old child.
Inquiry from Cleveland for governess for five year old child.
Inquiry from New Orleans for teacher for eleven year old boy.
Two teachers wanted in school for the deaf, Mystic, Conn.
Teacher wanted in Stamford, Conn.
Psychologist in Newark, N. J.
Teacher in private home, Newark, N. J.
Two teachers in Oswego, N. Y.
Governess for four year old boy, Milwaukee, Wis.
Norfolk Public Schools need several Special Class teachers.

Success is such a valuable stimulant for retarded children that great care should be exercised that they frequently have the opportunity to succeed. The wise teacher will give courage to the timid child by setting before him only such tasks as she knows he can do.